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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/601,573	06/24/2003	Seung-Jae Lee	1293.1798	8257
21171	7590	05/11/2004	EXAMINER	
STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			COLILLA, DANIEL JAMES	
			ART UNIT	PAPER NUMBER
			2854	

DATE MAILED: 05/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/601,573

Applicant(s)

LEE, SEUNG-JAE

Examiner

Dan Colilla

Art Unit

2854

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 June 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 7-9 is/are rejected.
- 7) ☒ Claim(s) 5 and 6 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Objections***

1. Claims 1-9 objected to because of the following informalities:

In claims 1 and 4, applicant recites that ribs “protrude on the paper guide.” This language doesn’t appear to clearly describe the structure shown in the Figures. The ribs appear to actually --protrude *from* the paper guide.-- Appropriate correction is required.

In claim 7, applicant has not recited any structure in this claim. Instead applicant has functionally recited a desired capability of the paper guide. Since this is an apparatus claim, structure must be recited.

In claim 8, applicant recites first guide ribs and second guide ribs. It would appear that these are the structures for applying the flattening abilities recited in claim 7. If this is so, then the recitation of the first and second guide ribs in claim 8 is a double recitation of these abilities recited in claim 7.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 7-9 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed

Art Unit: 2854

invention. In the last line of claim 7, applicant recites that, “the second flattening ability is greater than the first flattening ability.” Support for this language cannot be found in the specification.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 7-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In the last line of claim 7, applicant recites that, “the second flattening ability is greater than the first flattening ability.” It is not clear how applicant is determining the magnitude of a flattening ability.

***Claim Rejections - 35 USC § 102***

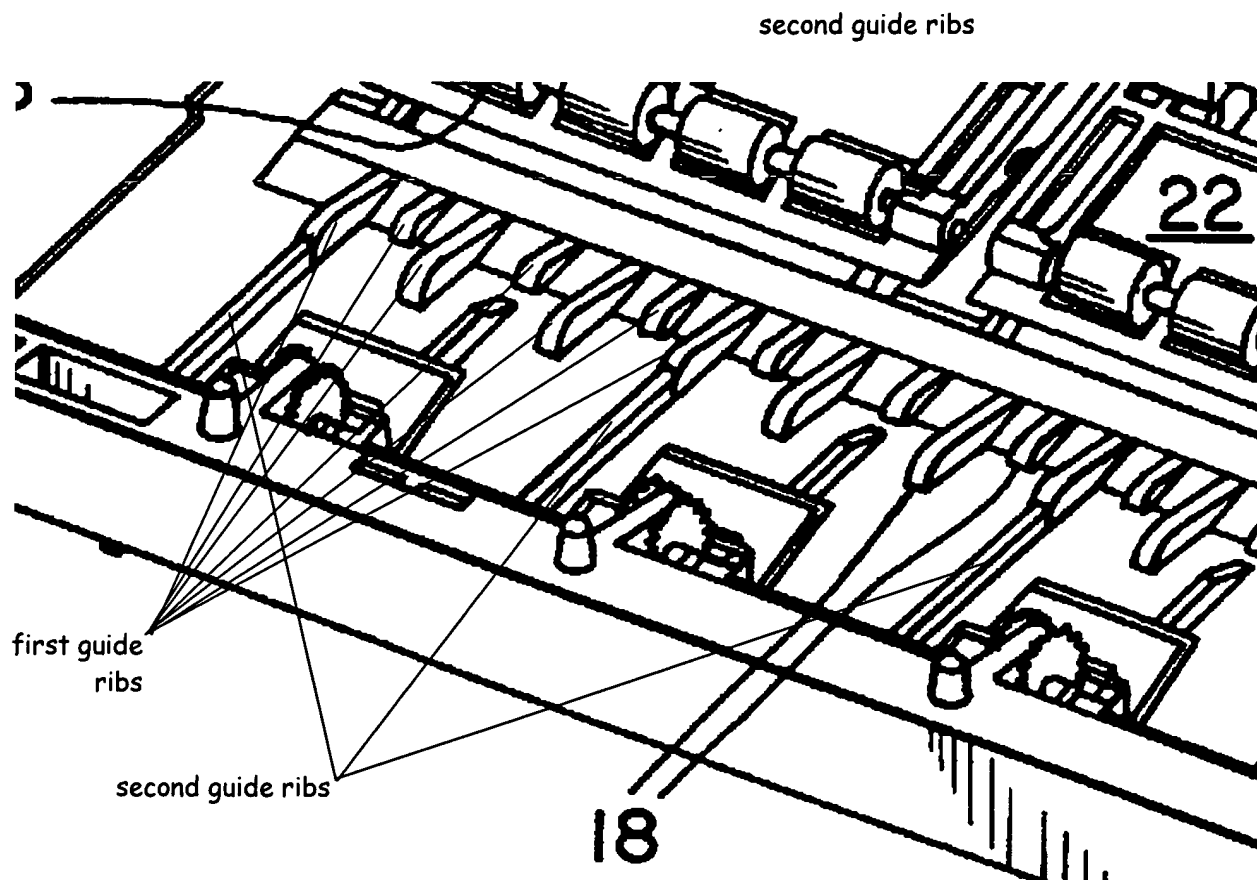
6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Bailey et al. (US 6,089,773).

With respect to claim 1, Bailey et al. discloses a paper guide with a plurality of first guide ribs and a plurality of second guide ribs as shown below:



The second guide ribs have a wider interval than the interval of the first ribs. It is noted that since applicant is only claiming a paper guide in this embodiment, the language regarding the printhead is not considered as required by the claim.

With respect to claim 2, the second guide ribs are linearly connected to the larger of the first guide ribs.

With respect to claim 3, there are multiple first guide ribs that are positioned between the first guide ribs.

8. Claims 1, and 7-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Kanemitsu (JP 2002-103706).

With respect to claim 1, Kanemitsu discloses a paper guide 30 including a plurality of first guide ribs 31 with a pitch of  $m$ , and a plurality of second guide ribs 32 with a pitch of  $n$ . Applicant's attention is invited to Figure 2 of Kanemitsu which shows that the pitch  $m$  is less than the pitch  $n$ , in other words, the interval between the first ribs 31 is smaller than the interval between the second ribs 32.

With respect to claim 7, Kanemitsu discloses a first region (ribs 31) having a first flattening ability, and a second region (ribs 32) having a second flattening ability. To the extent that this claim can be understood, it would appear that the second flattening ability must be greater than the first flattening ability since all the structure disclosed by Kanemitsu meets the structure recited in the claim.

With respect to claim 8, Kanemitsu discloses the ribs and intervals as mentioned in the above prior art rejection of claim 1.

With respect to claim 9, the ribs 31 are located under a first half of printhead 1 and the ribs 32 are located under a second half of the printhead as shown in Figure 1 of Kanemitsu.

### ***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

Art Unit: 2854

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kanemitsu (JP 2002-103706) in view of Bae (US 5,775,824).

Kanemitsu discloses the claimed ink-jet printer except for the ink-jet cartridge.

Kanemitsu discloses the paper guide structure as mentioned above with respect to claim 1 and further discloses a feed roller 3 and a printhead 1 as shown in Figure 1 of Kanemitsu. Bae teaches an ink-jet printer using a cartridge and printhead 40 as mentioned in col. 3, lines 4-6 of Bae. It would have been obvious to combine the teaching of Bae with the ink-jet printer disclosed by Kanemitsu for the advantage of easily replacing the ink cartridge when it runs out of ink.

***Allowable Subject Matter***

11. Claims 5-6 are objected to as being dependent upon a rejected base claim and objected to for containing the above mentioned informalities, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims and rewritten to overcome the above mentioned informalities.

12. The following is a statement of reasons for the indication of allowable subject matter:

Claims 5-6 have been indicated as containing allowable subject matter primarily for the plurality of second guide ribs connected linearly to the first guide ribs and the second guide ribs facing a rear-half swath of the printhead.

Art Unit: 2854

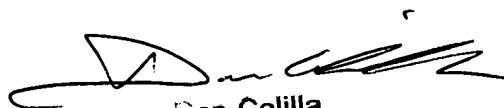
13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ohashi, Matsumoto, Kida et al. and Shikame are cited to show other examples of paper guides with first and second groups of ribs.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Colilla whose telephone number is (571)272-2157. The examiner can normally be reached Tues.-Fri. between 7:30 am and 6:00 pm. Faxes regarding this application can be sent to (703)872 - 9306.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached at (571)272-2168. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

April 30, 2004



Dan Colilla  
Primary Examiner  
Art Unit 2854